

**LISTING OF CLAIMS:**

1. (Currently Amended) Biodegradable, phase separated multiblock copolymer, comprising:

segments of a soft biodegradable prepolymer (A) having a T<sub>g</sub> glass transition temperature (T<sub>g</sub>) lower than 37°C; and

segments of a hard biodegradable prepolymer (B) having a T<sub>m</sub> melting point temperature (T<sub>m</sub>) of 40- 100°C, the segments being linked by a multifunctional chain-extender, wherein said chain-extender is an aliphatic chain-extender,

wherein the segments of the soft biodegradable prepolymer (A) and the segments of the hard biodegradable prepolymer (B) are randomly distributed in the copolymer.

2. (Cancelled) ~~Copolymer according to claim 1, wherein said chain-extender is an aliphatic chain-extender.~~

3. (Currently Amended) Copolymer according to claim 1, wherein prepolymer (A) comprises ester and/or carbonate groups, ~~optionally in combination with polyethers.~~

4. (Previously Presented) Copolymer according to claim 1, wherein a polyether is present as an additional prepolymer.

5. (Currently Amended) Copolymer according to ~~claim 2~~ claim 1, wherein prepolymer (A) comprises reaction products of ester forming monomers selected from diols, dicarboxylic acids and hydroxycarboxylic acids.

6. (Previously Presented) Copolymer according to claim 1, wherein prepolymer (A) comprises reaction products of cyclic monomers and/or non-cyclic monomers.

7. (Currently Amended) Copolymer according to claim 6, wherein said cyclic monomers are selected from glycolide, lactide (L, D or L/D),  $\epsilon$ -caprolactone,  $\delta$ -valerolactone, trimethylene carbonate, tetramethylenecarbonate, 1, 5-dioxepane-2-one, 1, 4-dioxane-2-one (*para*-dioxanone) and/or cyclic anhydrides such as oxepane-2, 7-dione.

8. (Currently Amended) Copolymer according to ~~claim 5~~ claim 6, wherein said non-cyclic monomers are selected from succinic acid, glutaric acid, adipic acid, sebacic acid, lactic acid, glycolic acid, hydroxybutyric acid, ethylene glycol, diethyleneglycol, 1, 4-butanediol and/or 1, 6-hexanediol.

9. (Currently Amended) Copolymer according to ~~claim 2~~ claim 4, wherein said ~~polyethers are~~ polyether is selected from PEG (polyethylene glycol), PEG-PPG (polypropylene glycol), PTMG (polytetramethyleneether glycol) and combinations thereof.

10. (Currently Amended) Copolymer, according to claim 1, ~~in particular a copolymer having a random monomer distribution~~, wherein prepolymer (A) is prepared by a ring-opening polymerisation initiated by a diol or di-acid compound.

11. (Currently Amended) Copolymer according to claim 9, wherein PEG is an initiator with a molecular weight of 150-4000, ~~preferably of 150-2000, more preferably of 300-1000.~~

12. (Currently Amended) Copolymer according to claim 1, wherein prepolymer (B) is prepared by a ring-opening polymerisation initiated by a diol or di-acid compound.

13. (Previously Presented) Copolymer according to claim 1, wherein prepolymer (B) contains a crystallisable amount of  $\epsilon$ -caprolactone,  $\delta$ -valerolactone, para-dioxanone, polyhydroxyalkanoate, aliphatic polyanhydride.

14. (Original) Copolymer according to claim 13, wherein pre-polymer (B) is poly- $\epsilon$ - caprolactone.

15. (Currently Amended) Copolymer according to claim 14, wherein pre-polymer (B) has a ~~M<sub>n</sub>~~ an average molecular weight ( $M_n$ ) of larger than 1000, ~~preferably larger than 2000, more preferably larger than 3000.~~

16. (Currently Amended) Copolymer according to claim 14 wherein the content of prepolymer (B) is 10-90 wt.% ~~preferably 30-50 wt.%.~~

17. (Currently Amended) Copolymer according to claim 1, having an intrinsic viscosity of at least 0.1 dl/g, ~~and preferably between 1-4 dl/g.~~

18-26. (Cancelled)

27. (Previously Presented) An implant comprising a copolymer according to claim 1.

28-30. (Cancelled)

Please add the following claims:

31. (New) Copolymer according to claim 3, wherein the ester and/or carbonate groups are in combination with polyethers.

32. (New) Copolymer according to claim 9, wherein PEG is an initiator with a molecular weight of 150-2000.

33. (New) Copolymer according to claim 9, wherein PEG is an initiator with a molecular weight of 300-1000.

34. (New) Copolymer according to claim 14, wherein pre-polymer (B) has and average molecular weight ( $M_n$ ) of larger than 2000.

35. (New) Copolymer according to claim 14, wherein pre-polymer (B) has and average molecular weight ( $M_n$ ) of larger than 3000.

36. (New) Copolymer according to claim 14 wherein the content of prepolymer (B) is 30-50 wt.%.

37. (New) Copolymer according to claim 1, having an intrinsic viscosity of between 1-4 dl/g.